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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,072

02/13/2006

Masaki Ukai

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EXAMINER

REDDY, KARUNA P

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

12/31/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/568,072	<b>Applicant(s)</b> UKAI ET AL.	
	<b>Examiner</b> KARUNA P. REDDY	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,8 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 7-8 and 10-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 9/17/2008 and 10/16/2008 has been entered.

Claim 1 is amended; claims 3-6 and 9 are cancelled. Accordingly, claims 1-2, 7-8 and 10-16 are currently pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Objections***

3. Claim 13 is objected to because of the following informalities: Recitation of claim limitation in parenthesis i.e. "(at 200C)" (line 4) is not recommended under the current U.S. practice. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. Claims 1-2, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwartz (US 2,872,429).

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Prior to setting forth the rejection, it is noted that the recitation of "for use in an automobile manufacturing line" in the preamble (cf. independent claim 14) is deemed to be a statement of purpose or intended use which is not seen to result in any structural difference between the instantly claimed invention and Schwartz et al and hence the preamble fails to limit the claim. MPEP 2111.02.

Schwartz et al disclose thermoplastic resins which are gelled at room temperature and atmospheric pressure to elastomeric plastigel (column 1, lines 53-57). The thermoplastic resin is selected from the group consisting of vinyl chloride - vinyl acetate copolymers, methyl methacrylate - ethyl methacrylate copolymers and homopolymers of ethyl methacrylate (column 1, lines 63-71).

The elastomeric composition is formed by initially plasticizing the powdered thermoplastic resin to thin paste, and subsequently adding the gelling accelerator to resultant plastisol to form the elastomeric plastigel (column 2, lines 37-41) i.e. reads on the two pack composition of present claims.

The liquid gelling solution contains at least two functional components, a plasticizer for the thermoplastic resin and a gelling accelerator (column 3, lines 17-19). Any plasticizer capable of wetting, dissolving or swelling the thermoplastic resins is used in preparing the initial plastisol or in formulating the gelling solution (column 3, lines 40-43).

To cause rapid gelation at room temperature, the liquid gelling solution must contain one of the gelling accelerator in addition to the plasticizer, and ethylene glycol diacetate is the preferred gelling accelerator (column 4, lines 4-9). Elastomeric plastigels are formed in from three to seven minutes when liquid gelling solutions containing from 65 to 82 percent by volume of plasticizer and 35-18 percent by weight of

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gelling accelerator is used (column 4, lines 17-22). An elastomeric plastigel is formed at room temperature by using a ratio of liquid gelling solution to thermoplastic resin of from 0.45:1 to 27.5:1 (column 4, lines 37-40).

Therefore, Schwartz et al anticipate the present claims.

***Claim Rejections - 35 USC § 102/103***

5. Claims 11 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schwartz et al (US 2,872,429).

The discussion with respect to Schwartz et al in paragraph 4 above is incorporated here by reference.

Schwartz et al is silent with respect to viscosity of the mixture of present claims.

However, given that plastisol and gelling solution of Schwartz et al used to form the mixture comprise substantially similar components as in present claims, it is the examiner's position that presently claimed sprayable viscosity and a viscosity of from 50 to 200 Pas at 20<sup>0</sup>C is inherently present in the mixture of cited prior art of Schwartz et al. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705,709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Schwartz et al anticipate the present claims.

Alternatively, presently claimed viscosity would have been present once the mixture is prepared using the plastisol and gelling solution of Schwartz et al.

***Claim Rejections - 35 USC § 103***

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6. Claims 7-8 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al (US 2,872,429) in view of Nakano et al (US 5,166,229).

The discussion with respect to Schwartz et al in paragraph 4 above is incorporated here by reference.

Schwartz et al is silent with respect to a) thermosetting epoxy resin and latent curing agent; and b) utilization of composition in an automobile assembly line.

With respect to a), Nakano et al teach epoxy resin composition containing an epoxy resin and an organic gelling agent (abstract). The epoxy resins are widely used as an adhesive or paint composition because of their adhesion to various materials with excellent mechanical properties, electrical properties and chemical resistance (column 1, lines 16-19). The composition is incorporated with a latent curing agent (column 3, lines 14-15) to accelerate curing of resins. Therefore, it would have been obvious to one skilled in the art at the time invention was made to add thermosetting epoxy resins and latent curing agent to the elastomeric plastigel of Schwartz et al, for above mentioned advantages.

With respect to b) Nakano et al teach that the epoxy resin composition has excellent shower resistance and wiping properties and is useful as an adhesive, particularly as a structural adhesive in an assembly line of automobiles (abstract). The composition can be used in spot welding in the assembly line of automobiles (column 3, lines 34-35) and reads on claims 14-16. Therefore, it would have been obvious to apply the elastomeric plastigel of Schwartz et al in view of Nakano et al in the spot welding step as an underbody coating or adhesive, because Nakano et al have proven successfully the process of applying resin composition comprising a gelling agent in the spot welding step of assembly line of automobiles and one of ordinary skill in the art

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would have expected the process to work for the elastomeric plastigel of Schwartz et al in view of Nakano et al, motivated by expectation of success.

### ***Response to Arguments***

7. Applicant's arguments with respect to rejection of claims 1-2, 10-12 under 35 U.S.C. 103(a) as being unpatentable over Takegawa et al (US 4,386,992); and claims 7-8 and 13-16 under 35 U.S.C. 103(a) as being unpatentable over Takegawa (US 4,386,992) in view of Nakano et al (US 5,166,229), have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. P. R./  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796